

Application No.: 10/821,805

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Docket No.: 58418CIP(48497)

Listing of the Claims:

This listing of claims will replace all prior listings:

1. (Currently Amended) A PNA probe comprising a nucleobase sequence for the detection, identification or quantitation of *Pseudomonas*, wherein said PNA probe comprises a sequence of 10 15– 17 nucleobase subunits in length, wherein at least a portion of the probe is at least 90% identical to the nucleobase sequence or complement thereof comprising CCT ACC ACC TTA AAC (SEQ ID NO: 1), and wherein said PNA probe is complementary to a target sequence of 23S rRNA or rDNA of *Pseudomonas aeruginosa*, *Pseudomonas alcaligenes*, *Pseudomonas chlororaphis*, *Pseudomonas fluorescens*, *Pseudomonas fragi*, *Pseudomonas huttiensis*, *Pseudomonas luteola*, *Pseudomonas mendocina*, *Pseudomonas mucidolens*, *Pseudomonas nitroreducens*, *Pseudomonas pseudoalcaligenes*, *Pseudomonas putida*, *Pseudomonas stutzeri*, or *Pseudomonas veronii*, or sequences complementary to these target sequences.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Original) The PNA probe of claim 1, wherein the probe is labeled with at least one detectable moiety.

6. (Original) The PNA probe of claim 5, wherein the detectable moiety or moieties are selected from the group consisting of: a conjugate, a branched detection system, a chromophore, a fluorophore, a spin label, a radioisotope, an enzyme, a hapten, an acridinium ester and a luminescent compound.

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7. (Original) The PNA probe of claim 5, wherein the probe is self-reporting.

8. (Previously Presented) The PNA probe of claim 7, wherein the probe comprises a PNA Linear Beacon.

9. (Original) The PNA probe of claim 1, wherein the probe is unlabeled.

10. (Original) The PNA probe of claim 1, wherein the probe is bound to a support.

11. (Previously Presented) The PNA probe of claim 1, wherein the probe further comprises a spacer or a linker.

12. -24 (Canceled)

25. (Currently Amended) A kit comprising a PNA probe comprising a nucleobase sequence for the detection, identification or quantitation of Pseudomonas, wherein said PNA probe comprises a sequence of 15 ~ 17 nucleobase subunits in length, wherein at least a portion of the probe is at least 90% identical to the nucleobase sequence or complement thereof comprising CCT ACC ACC TTA AAC (SEQ ID NO: 1), and wherein said PNA probe is complementary to a target sequence of 23S rRNA or rDNA of Pseudomonas aeruginosa, Pseudomonas alcaligenes, Pseudomonas chlororaphis, Pseudomonas fluorescens, Pseudomonas fragi, Pseudomonas huttiensis, Pseudomonas luteola, Pseudomonas mendocina, Pseudomonas mucidolens, Pseudomonas nitroreducens, Pseudomonas pseudoalcaligenes, Pseudomonas putida, Pseudomonas stutzeri, or Pseudomonas veronii, or sequences complementary to these target sequences, and instructions for use, for the detection, identification or quantitation of Pseudomonas aeruginosa, Pseudomonas alcaligenes, Pseudomonas chlororaphis, Pseudomonas fluorescens, Pseudomonas fragi, Pseudomonas huttiensis, Pseudomonas

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~~Pseudomonas luteola, Pseudomonas mendocina, Pseudomonas mucidolens, Pseudomonas nitroreducens, Pseudomonas pseudoalcaligenes, Pseudomonas putida, Pseudomonas stutzeri, or Pseudomonas veronii~~ in a sample, wherein said kit comprises: a) a PNA probe according to claim 1 and b) directions for using the kit.

26. (Cancelled) - 33. (Cancelled)

34. (Currently Amended) A PNA probe comprising a nucleobase sequence for the detection, identification or quantitation of *Pseudomonas* wherein said PNA probe comprises a sequence of 105 – 17 nucleobase subunits in length, wherein the PNA probe comprises the following probe sequence: CCT ACC ACC TTA AAC (SEQ ID NO: 1), the complement or variations thereof, and wherein said PNA probe is complementary to a target sequence of 23S rRNA or rDNA of *Pseudomonas aeruginosa*, *Pseudomonas alcaligenes*, *Pseudomonas chlororaphis*, *Pseudomonas fluorescens*, *Pseudomonas fragi*, *Pseudomonas huttiensis*, *Pseudomonas luteola*, *Pseudomonas mendocina*, *Pseudomonas mucidolens*, *Pseudomonas nitroreducens*, *Pseudomonas pseudoalcaligenes*, *Pseudomonas putida*, *Pseudomonas stutzeri*, and *Pseudomonas veronii*, or sequences complementary to these target sequences.

35. (New) A PNA probe comprising SEQ ID NO: 1.

36. (New) A kit comprising the PNA probe of claim 34 for the detection, identification and/or quantification of *Pseudomonas*, and instructions for use.

37. (New) A kit comprising a PNA probe comprising SEQ ID NO: 1.

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